

Regional Profiles of the Workforce by Ethnicity and Migrant Workers

Yorkshire and the Humber

A. Green, D. Owen and R. Wilson

November 2005

CONTACT DETAILS

Institute for Employment Research
University of Warwick
COVENTRY, CV4 7AL
Anne.Green@warwick.ac.uk
D.W.Owen@warwick.ac.uk
R.A.Wilson@warwick.ac.uk
Tel: 02476-523530

Contents

	Page Numbers
Acknowledgements	iii
Executive Summary	v
1. INTRODUCTION	1
2. REGIONAL PROFILE	2
2.1 <i>Structure of Employment by Ethnic Group</i>	2
2.2 <i>Shift-share Analysis of Employment Change by Ethnic Group</i>	10
2.3 <i>Migrants</i>	14
2.4 <i>Key Structural Features of the Labour Market</i>	21
2.5 <i>Demographic Structure</i>	26
Annex A Background, Aims and Objectives	31
Glossary	33
References	33

LIST OF TABLES

Table 2.1	Workplace Employment (jobs) by Ethnic group, Yorkshire and the Humber (000s)	3
Table 2.2	Occupational Employment by Ethnic group, 2004	5
Table 2.3	Industrial Employment by Ethnic group, 2004	6
Table 2.4	Employment Change by Ethnic group (Yorkshire and the Humber)	11
Table 2.5	Shift-share Analysis of Employment Change by Industry and by Ethnic Group (Yorkshire and the Humber)	12
Table 2.6	Shift-share Analysis of Employment Change by Occupation and by Ethnic group (Yorkshire and the Humber)	13
Table 2.7	Change in Percentage of Workers, Non-UK born, 1994-2004 by Age Group	16
Table 2.8	Percentage of Migrants in the Workforce by Age Group, 1994	16
Table 2.9	Percentage of Migrants in the Workforce by Age Group, 2004	16
Table 2.10	Change in Percentage of Workers, Non-UK Born, 1994-2004, by Industry	17
Table 2.11	Percentage of Migrants in the Employed Workforce by Industry, 1994	18
Table 2.12	Percentage of Migrants in the Employed Workforce by Industry, 2004	19
Table 2.13	Percentage of Migrants by Occupation, 2004	20
Table 2.14	Percentage of Migrants by Ethnic Group, 2004	20
Table 2.15	Population, Yorkshire and the Humber	28
Table 2.16	Labour Force, Yorkshire and the Humber	29
Table 2.17	Activity Rates, Yorkshire and the Humber	30

LIST OF FIGURES

Figure 2.1	Employment by Ethnic Group	4
Figure 2.2	Employment by Ethnic Group and Occupation (Jobs), 2004	8
Figure 2.3	Employment by Ethnic Group and Sector (Jobs), 2004	9
Figure 2.4	General Labour Market Profile, 2004, Yorkshire and the Humber	22
Figure 2.5	General Labour Market Profile, 2014, Yorkshire and the Humber	23
Figure 2.6	Projected Changes 2004-2014 (000s), Yorkshire and the Humber	24
Figure 2.7	Projected Changes 2004-2014 (%p.a.), Yorkshire and the Humber	25

Acknowledgements

The authors are grateful to the Learning and Skills Council for funding this research. Cambridge Econometrics provided the Demographic and Labour supply data. Many of the results are linked to data in *Working Futures 2004-2014* which was produced under the auspices of the Sector Skills Development Agency. Thanks are also due to the participants in the case studies who generously donated their time in order to take part.

Peter Miller, Andrew Holden and Amanda Kerry provided clerical and secretarial assistance. Responsibility for the views expressed and any remaining errors lies solely with the authors.

Executive Summary

The aim of this project is to provide a succinct analysis of changing patterns of employment by ethnic groups and for migrants. The objective is to provide a set of national and regional profiles of employment patterns, focussing upon gender, age and ethnic group, including variations across occupation and sector dimensions (as far as the data will allow). This is one of 9 *Regional Profiles*. The profiles are complemented by a *National Report*, which provides an overview and some cross-regional comparisons, and a more detailed *Technical Report*, which describes sources and methods. A key objective is to provide consistent and comparable data by region to help users to identify how they sit in the broader national picture.

The prime audience is high level policy makers and administrators within the LSC although the intention is to provide reports which will be of interest and value to a broader audience, including the Sector Skills Development Agency (SSDA), Sector Skills Councils (SSCs) and other employer bodies, Regional Development Agencies (RDAs), the Department for Education and Skills (DfES), etc.

It is important to recognise that there are a number of conceptual and practical problems in defining and measuring ethnicity and migrants. These issues are discussed in detail in the *National Report*. They include the small size of samples once disaggregated by region and ethnic group/migrant status have been undertaken, which make obtaining robust estimates difficult. Originally, it had been hoped to present some benchmark projections by ethnic group. However, it has become clear in the course of the project that this is not feasible without a complete and robust demographic model of changing ethnic patterns. Such work is currently underway within ONS which will facilitate such projections in due course.

The results presented use a variety of sources and methods. The main sources of data are the LFS, Census of Population and *Working Futures* (including some new more detailed demographic and labour supply projections – excluding ethnicity). A standard set of “profiles” is therefore developed for each region and the whole of England. These present information in a consistent and comparable format, enabling direct comparisons to be made. These profiles are primarily in the form of a standard set of tables and charts, with only limited text. The latter is confined to a few bullet points highlighting key features.

The key findings to emerge for Yorkshire and the Humber are:

- Ethnic minorities accounted for around 5½% of employment in Yorkshire and the Humber in 2004 which is about average for most regions other than London
- It had more than doubled since 1994.
- The largest single ethnic group is people of Asian origin, accounting for over 3% of total employment in 2004.
- In Yorkshire & the Humber ethnic minorities are over-represented at both ends of the skills continuum: in professional and associate professional & technical occupations at one end, and in elementary occupations and sales & customer service occupations at the other end.

- By contrast, they are under-represented in managerial occupations, admin. and clerical occupations and skilled trades.
- There are important variations in occupational profiles between ethnic minority groups. For example, almost half the “other” ethnic group category are in professional and associate professional occupations.
- Ethnic minority groups are more concentrated in service industries than White people, especially in distribution, hotels & catering and health & social work.
- Changes in the occupational and industrial profile of *employment* have been dominated by changes in the ethnic profile of the *workforce* and the *population*. By contrast, changes in occupational or industrial structure have played only a minor role in the changing profile of employment by ethnic group.
- Almost 6% of males and around 4% of females in employment were born outside the UK.
- There is a heavy concentration of migrant workers in food drink & tobacco, hotels & catering and health & social work.
- It is professional occupations that has the highest concentration of migrant workers. Migrants are least concentrated in admin. & clerical occupations and skilled trades.

1. Introduction

This report is one of a set of 9 presenting a standard set of *Regional Profiles* for each of the English regions, focussing on general labour market trends but with a special emphasis on issues relating to ethnicity and migrants. Further details of the background to the project data sources and methods are given in Annex A. The data are presented in a common set of tables and charts with brief commentary.

A common structure is adopted for all the *Regional Profiles*:

1. *Structure of Employment by Ethnic Group:* A brief overview of employment (jobs), by industry and occupation, by ethnic group.
2. *Shift-share Analysis of Employment Change by Ethnic Group:*
This covers the historical period 1994-2004. It is based on LFS data but scaled so as to be consistent with information from *Working Futures 2004-2014*.¹
3. *Migrants:*
Migrants are defined as workers born outside the UK. The tables on migrant workers are based on Labour Force Survey data for 1994 and 2004. A summary of the limited data available is presented, including breaks by age and deployment by industry and occupation.
4. *Key Structural Features of the Labour Market:*
This section provides a brief summary of the key features of general employment patterns in the geographical area concerned, focussing upon historical patterns and projected future changes by:
 - gender & status;
 - sector; and
 - occupation.
5. *Demographic structure*
This section provides profiles of the population and the workforce by age and gender, in the form of tables and charts present a detailed analysis of current and projected future patterns by age and gender.

¹ *Working Futures 2004-2014* comprises the most detailed and comprehensive analysis of historical and projected future trends in employment structure ever published in the UK. Details can be found in Wilson *et al.* (2005).

2. Regional Profile

2.1 Structure of Employment by Ethnic Group

The estimates in Sections 2.1 and 2.2 are based on a combination of data from the Labour Force Survey (LFS) and *Working Futures 2004-2014*. The latter represents the most comprehensive and consistent set of employment estimates and projections available for the UK, providing detailed breaks by sector and geographical area as well as occupation, gender and employment status. It does not, however, include anything on ethnicity. The present report combines the *Working Futures* data with information on the ethnic structure of employment from the LFS to provide a consistent picture. The *Working Futures* employment data are on a workplace (jobs) basis. The data on ethnicity from the LFS are on a residence (heads) basis. The present results assume that the same patterns of ethnicity apply on workplace and residence bases. In Yorkshire and the Humber these two measures only differ slightly. The LFS estimate of numbers of people in employment (residents/heads) in 2004 is 2,244 thousand, while the *Working Futures* estimate of workplace jobs is 2,444 thousand. The profiles also include (in Section 2.3) information on migrants based solely on LFS data.

The overall pattern of employment by ethnicity in the Yorkshire and the Humber is summarised in Table 2.1. Together with Figure 2.1, this provides an overview of the patterns of employment in the region by ethnic group. The first panel of the figure shows the significance of ethnic minority employment in the region. Comparable information is also shown for Great Britain as a whole. The other two panels illustrate how these patterns are changing. The bottom left panel shows the absolute changes in employment over the next decade, while the bottom right panel illustrates how this compares in terms of percentage growth rates with the position in the whole of Great Britain.

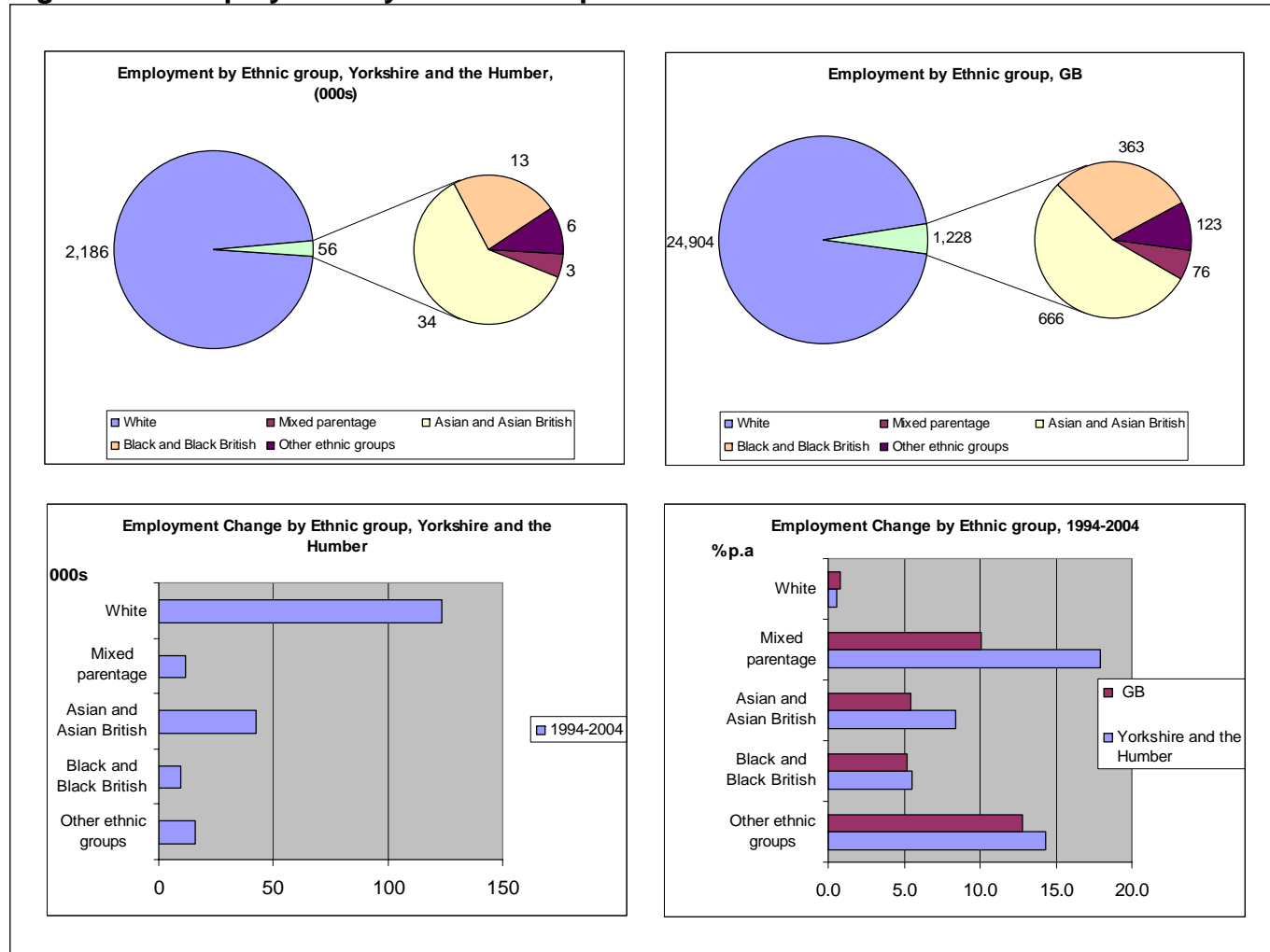
Table 2.1: Workplace Employment (Jobs) by Ethnic Group, Yorkshire and the Humber, (000s)

Ethnic group	1994			2004		
	Yorkshire and the Humber 000s	% share	GB % share	Yorkshire and the Humber 000s	% share	GB % share
White	2,186	97.5	95.3	2,310	94.5	92.0
<i>All ethnic minorities</i>	56	2.5	4.7	134	5.5	8.0
Mixed parentage	3	0.1	0.3	14	0.6	0.7
<i>Asian and Asian British</i>	34	1.5	2.5	76	3.1	3.9
Indian	16	0.7	1.6	28	1.1	2.0
Pakistani	17	0.8	0.5	43	1.8	0.9
Bangladeshi	0	0.0	0.1	3	0.1	0.3
Other Asian	1	0.0	0.3	3	0.1	0.6
<i>Black and Black British</i>	13	0.6	1.4	22	0.9	2.1
<i>Black-Caribbean</i>	10	0.5	0.9	12	0.5	1.0
Black-African	2	0.1	0.4	10	0.4	1.0
Black-Other	1	0.0	0.1	1	0.0	0.1
<i>Other ethnic groups</i>	6	0.3	0.5	22	0.9	1.4
Chinese	4	0.2	0.3	8	0.3	0.4
Other	1	0.1	0.2	14	0.6	1.0
<i>Total</i>	<i>2,241</i>	<i>100.0</i>	<i>100.0</i>	<i>2,444</i>	<i>100.0</i>	<i>100.0</i>

Source: IER estimates based on analysis of LFS data and information from *and Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are in therefore terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative.

Figure 2.1: Employment by Ethnic Group



Source: IER estimates based on LFS data and information from *Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are in therefore terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative.

Table 2.2: Occupational Employment by Ethnic Group, 2004

Yorkshire and the Humber	All		White		All Ethnic Minorities		Mixed		Asian		Black		Other	
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%
Occupations														
Managers and Senior Officials	300	13.4	289	13.6	11	9.2	1	9.3	7	9.7	1	5.4	2	11.5
Professional occupations	251	11.2	232	10.9	20	15.9	1	6.3	11	15.9	2	12.1	5	26.4
Associate Professional and Technical	289	12.9	269	12.7	20	16.2	3	25.2	9	12.4	4	19.7	4	20.2
Administrative and Secretarial	252	11.2	245	11.5	8	6.1	0	2.0	4	5.8	2	9.8	1	5.9
Skilled Trades Occupations	276	12.3	269	12.7	7	6.1	1	7.6	5	6.5	2	8.2	0	1.3
Personal Service Occupations	173	7.7	163	7.7	10	8.1	2	16.1	5	6.9	2	11.0	1	4.4
Sales and Customer Service Occupations	192	8.6	179	8.4	13	10.7	2	11.7	10	13.9	1	5.3	1	4.5
Machine and Transport Operatives	212	9.4	199	9.4	13	10.4	1	8.6	9	12.3	2	11.3	1	4.2
Elementary Occupations	298	13.3	277	13.1	21	17.2	2	13.1	12	16.7	4	17.2	4	21.5
Total	2,244	100.0	2,121	100.0	123	100.0	13	100.0	70	100.0	21	100.0	20	100.0

Source: IER estimates based on analysis of LFS, etc.

Note: Estimates are numbers of people (residents/heads). Any estimates below 6,000 should be regarded as unreliable.

Table 2.3: Industrial Employment by Ethnic Group, 2004

Yorkshire and the Humber Sector	All		White		All Ethnic Minorities		Mixed		Asian		Black		Other	
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%
Agriculture etc	26	1.2	26	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mining & quarrying	3	0.1	3	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Food, drink & tobacco	57	2.5	51	2.4	6	4.6	0	2.8	3	4.3	1	7.2	1	4.1
Engineering	62	2.8	58	2.7	4	3.2	1	4.0	2	3.4	1	2.7	1	2.8
Rest of manufacturing	243	10.9	231	10.9	13	10.3	1	10.0	8	10.7	2	11.5	2	8.0
Electricity, gas & water	15	0.7	14	0.7	1	0.8	0	0.0	0	0.6	1	2.9	0	0.0
Construction	194	8.7	191	9.0	3	2.7	1	8.2	1	1.7	1	5.4	0	0.0
Distribution	350	15.6	328	15.5	22	18.1	2	15.2	16	23.1	2	8.5	2	12.3
Hotels and catering	101	4.5	93	4.4	9	7.1	1	8.7	5	6.8	0	1.5	3	12.9
Transport & telecommunications	162	7.2	153	7.2	9	6.9	0	2.2	7	9.4	1	5.4	1	3.0
Banking & insurance	84	3.8	79	3.7	5	4.3	1	7.5	3	4.6	1	3.8	0	1.5
Other business services	199	8.9	187	8.8	11	9.3	1	4.3	8	10.8	1	4.5	2	12.5
Public admin and defence	141	6.3	136	6.4	5	4.2	1	7.1	3	3.7	1	3.7	1	4.6
Education	220	9.8	212	10.0	8	6.6	1	4.0	4	6.0	1	7.3	2	9.9
Health and social work	274	12.2	251	11.8	23	18.6	3	19.7	8	11.5	7	34.4	5	26.8
Miscellaneous services	111	5.0	107	5.1	4	3.1	1	6.3	2	3.4	0	1.2	0	1.6
Total	2,243	100.0	2,120	100.0	123	100.0	13	100.0	70	100.0	21	100.0	20	100.0

Source: IER estimates based on analysis of LFS, etc.

Note: Estimates are numbers of people (residents/heads). Any estimates below 6,000 should be regarded as unreliable.

On average, in Great Britain as a whole around 8% of all jobs in 2004 were filled by people from ethnic minorities. The share in Yorkshire and the Humber is lower at around 5½% although this is about average for regions outside London. The share was up from 2½% in 1994.

The largest single ethnic minority group is people of Pakistani origin, accounting for 1.8% of total employment in 2004.

The Pakistani group is the only ethnic minority group accounting for a greater share of employment in Yorkshire & the Humber than nationally.

Table 2.2. and Figure 2.2 illustrate how the occupational profile of employment varies across occupations. Ethnic minorities are also under-represented in occupations such as managers & senior officials, (which in any case has an older than average age structure).

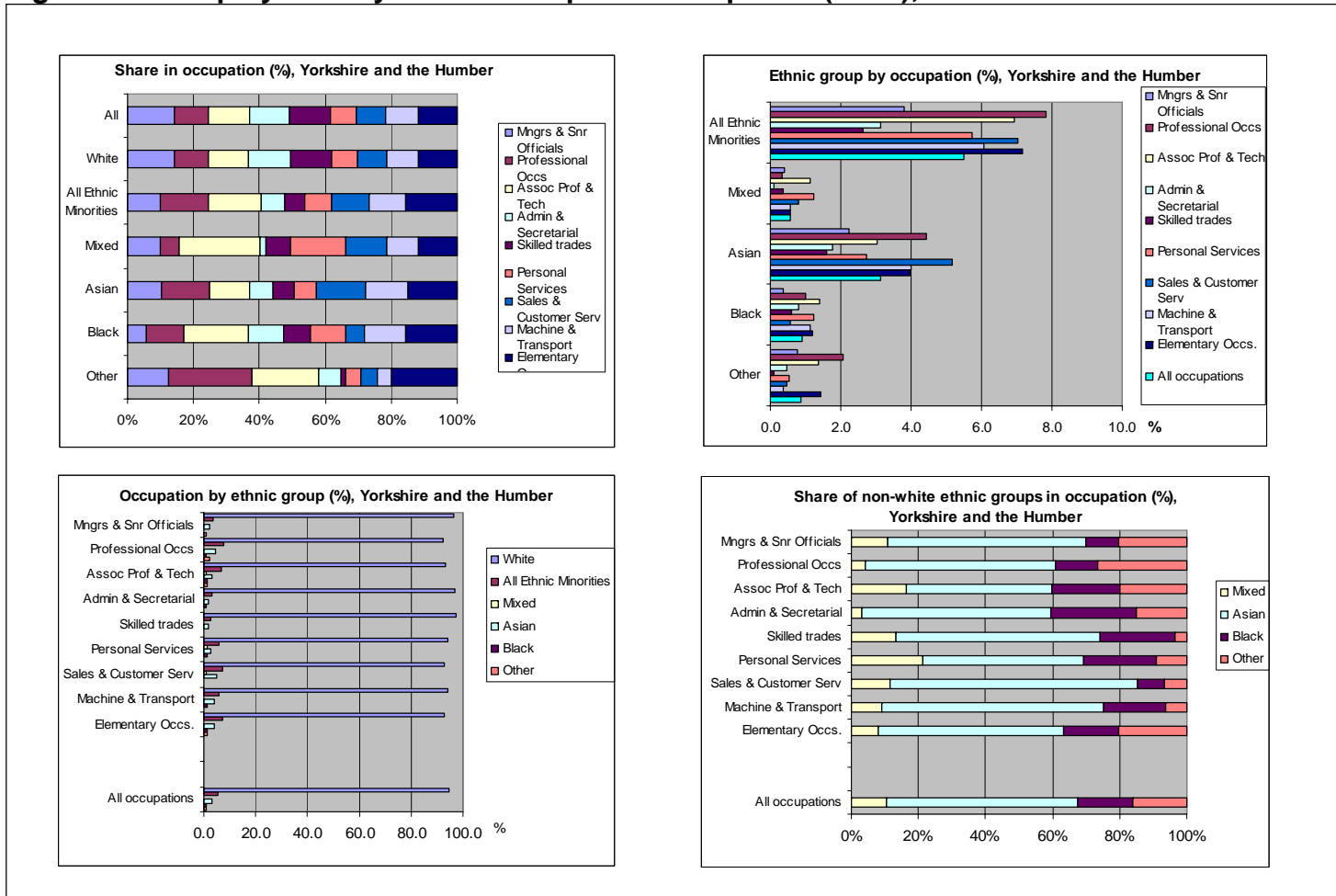
In contrast ethnic minorities are over-represented in occupations such as professional occupations, associate professional occupations and sales and customer service occupations as well as elementary occupations.

Figure 2.3 and Table 2.3 present a similar analysis, but this time focussing upon industries.

Ethnic minorities are significantly under-represented in industries such as agriculture, mining and construction.

In contrast they take up a more than proportionate share of the jobs in food, drink & tobacco, and in some parts of the service sector including distribution, hotels & catering and health & social care.

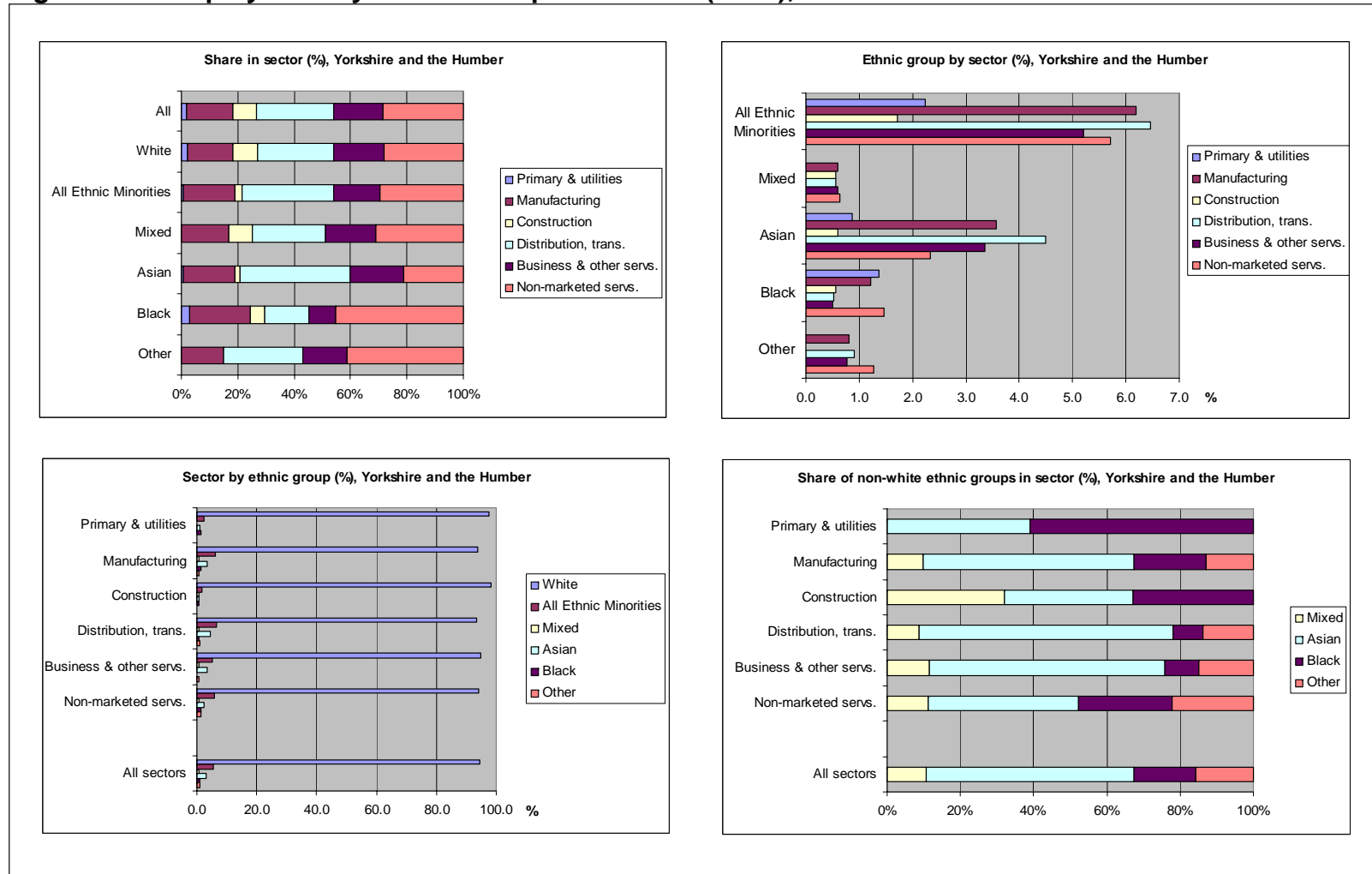
Figure 2.2: Employment by Ethnic Group and Occupation (Jobs), 2004



Source: IER estimates based on LFS data and information from *Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are in therefore terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative.

Figure 2.3: Employment by Ethnic Group and Sector (Jobs), 2004



Source: IER estimates based on LFS data and information from *Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are in therefore terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative.

2.2 *Shift Share Analysis of Employment Change by Ethnic Group*

Historical changes in employment by ethnic group cross-classified by industry and by occupation are illustrated in Tables 2.4 and 2.5. These changes can be analysed using shift share techniques in order to assess the extent to which different ethnic groups have benefited or suffered from structural shifts in employment.

The shift share analysis separates the total change into three parts:

- a scale effect – what would have happened if employment in all groups and categories had grown (or declined) in line with the total;
- an industry (or occupational) effect which shows how particular groups have benefited because of structural changes (assuming the share of employment by ethnic group remains as in the base year);
- an ethnicity effect - the residual.

The industry analysis is shown in Table 2.4 while the occupational analysis is presented in Table 2.5. In both cases the change in employment by ethnic group is dominated by the ethnicity effect. By contrast, the industry or occupational effect is trivial.

The implication is that it is supply side pressures (the growth of the population and labour supply) from different ethnic groups that dominate changing employment patterns by ethnic group, rather than a demand side structural shift in the composition of employment by industry (or occupation).

This means that in order to make robust projections of employment by ethnic group it is essential to have good demographic models. Such work is ongoing within ONS.

Once these results are available it will be possible to extend this historical analysis and produce indicative projections.

As in England as a whole, the shift share analysis suggests that ethnicity effects predominate. Neither industry nor occupational effects are significant. Changing patterns of ethnic employment have been driven by the ethnicity effect. This in turn is a reflection of the large increases in the supply of people in these categories who have found employment in most parts of the economy.

Table 2.4: Employment Change by Ethnic Group (Yorkshire and the Humber)

Ethnic group	000s	% share	000s	% share
	1994		2004	
White	2,185	97.5	2,309	94.5
<i>All ethnic minorities</i>	57	2.5	135	5.5
Mixed parentage	3	0.1	14	0.6
<i>Asian and Asian British</i>	35	1.6	77	3.2
Indian	16	0.7	28	1.1
Pakistani	18	0.8	44	1.8
Bangladeshi	0	0.0	3	0.1
Other Asian	1	0.0	3	0.1
<i>Black and Black British</i>	13	0.6	22	0.9
<i>Black-Caribbean</i>	10	0.5	12	0.5
Black-African	2	0.1	10	0.4
Black-Other	1	0.1	1	0.0
<i>Other ethnic groups</i>	6	0.3	22	0.9
Chinese	4	0.2	8	0.3
Other	1	0.1	14	0.6
<i>Total</i>	<i>2,241</i>	<i>100.0</i>	<i>2,444</i>	<i>100.0</i>

Source: IER estimates based on LFS data and information from *Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are therefore in terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative.

Table 2.5: Shift-share Analysis of Employment Change by Industry and by Ethnic group (Yorkshire and the Humber)

Ethnic group	000s Total change 1994-2004	% p.a.	000s Industry effect	% Ethnicity effect	000s Scale effect	%	000s	%
White	124	0.6	0	0.0	-73	-3.3	197	9.0
<i>All ethnic minorities</i>	78	9.1	0	0.6	73	129.0	5	9.0
Mixed parentage	11	17.9	0	1.2	11	410.6	0	9.0
<i>Asian and Asian British</i>	42	8.3	0	1.3	39	110.8	3	9.0
Indian	12	5.5	0	1.4	10	60.2	1	9.0
Pakistani	26	9.4	0	1.3	24	134.3	2	9.0
Bangladeshi	3	0.0	0	0.0	3	0.0	0	0.0
Other Asian	2	16.9	0	0.2	2	368.9	0	9.0
<i>Black and Black British</i>	9	5.4	0	-1.5	8	61.3	1	9.0
<i>Black-Caribbean</i>	1	1.1	0	-1.9	0	4.2	1	9.0
Black-African	8	20.2	0	-2.4	8	524.8	0	9.0
Black-Other	0	-2.6	0	2.8	0	-34.7	0	9.0
<i>Other ethnic groups</i>	16	14.0	0	1.1	15	259.5	1	9.0
Chinese	3	5.9	0	-0.4	3	68.2	0	9.0
Other	12	25.1	0	5.5	12	824.6	0	9.0
<i>Total</i>	<i>203</i>	<i>0.9</i>	<i>0</i>	<i>0.0</i>	<i>0</i>	<i>0.0</i>	<i>203</i>	<i>9.0</i>

Source: IER estimates based on LFS data and information from *Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are therefore in terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative. b) The change in Black-Other may reflect the change in ethnic group classification between 1994 and 2004 which resulted in many Black-Other people being re-classified to the mixed parentage ethnic group.

Table 2.6: Shift-share Analysis of Employment Change by Occupation and by Ethnic group (Yorkshire and the Humber)

Ethnic group	000s	% p.a.	000s	%	000s	%	000s	%
	Total change 1994-2004		Occupation effect	Ethnicity effect		Scale effect		
White	124	0.6	0	0.0	-74	-3.4	198	9.0
<i>All ethnic minorities</i>	79	9.2	0	0.5	74	132.3	5	9.0
Mixed parentage	11	17.9	0	1.2	11	408.2	0	9.0
<i>Asian and Asian British</i>	42	8.4	0	1.2	39	113.1	3	9.0
Indian	12	5.6	0	1.3	10	61.8	1	9.0
Pakistani	26	9.5	0	1.1	24	137.8	2	9.0
Bangladeshi	3	0.0	0	0.0	3	0.0	0	0.0
Other Asian	2	16.9	0	0.2	2	366.9	0	9.0
<i>Black and Black British</i>	9	5.5	0	-1.6	8	63.9	1	9.0
<i>Black-Caribbean</i>	1	1.0	0	-1.9	0	3.8	1	9.0
Black-African	8	20.2	0	-2.4	8	522.6	0	9.0
Black-Other	0	-0.6	0	2.2	0	-17.0	0	9.0
<i>Other ethnic groups</i>	16	14.3	0	0.9	15	272.2	1	9.0
Chinese	3	5.8	0	-0.4	3	67.5	0	9.0
Other	13	27.0	0	5.5	12	980.2	0	9.0
<i>Total</i>	<i>203</i>	<i>0.9</i>	<i>0</i>	<i>0.0</i>	<i>0</i>	<i>0.0</i>	<i>203</i>	<i>9.0</i>

Source: IER estimates based on LFS data and information from *Working Futures 2004-2014*.

Notes: a) The LFS data are in terms of numbers of people (residents/heads). Shares are applied to *Working Futures* estimates of workplace employment (jobs). The estimates in this table are therefore in terms of numbers of jobs. Estimates based on numbers below 1,000 should be discounted as insignificant. Estimates based on numbers below 6,000 should be regarded as indicative. b) The change in Black-Other may reflect the change in ethnic group classification between 1994 and 2004 which resulted in many Black-Other people being re-classified to the mixed parentage ethnic group.

2.3 Migrants

In the following tables, migrant workers are defined as people in work (employed or self-employed), who were born outside the United Kingdom. Three categories of people born outside the UK are distinguished: those born in the rest of the 15-member EU; those born in the 10 “accession countries” which joined the EU in 2004 and those born elsewhere in the world. In most tables, percentages of males and females who are migrants are presented. The source for these tables is the quarterly Labour Force Survey.

Due to the high degree of sampling error associated with small numbers derived from a sample survey, percentages based on fewer than 6 thousand individuals are suppressed in these tables (and replaced by the symbol “-”).

a) Age group

Overall, the percentage of migrant workers grew by about half between 1994 and 2004 (Table 2.7); from 3.5% of males in 1994 to 5.6% in 2004, and from 3% in 1994 to 4.1% in 2004 for females. This increase was most rapid for people aged 25-34.

In Table 2.8 the percentages of workers from the UK and the three regions of the world described above in 1994 is presented. The numbers of workers born in the EU by age group were too small to be reported. However, 2.5% of men and 1.9% of women in work had been born outside EU25, and only 0.8% of men and 1% of women born in the other EU15 countries. For both men and women, migrant workers were most common in the 35-44 age group (as well as for women aged 60-64), and least common for 16-24 year olds. The share of those born in the rest of the world was highest for 35-44 year olds.

By 2004, migrants from the rest of the EU15 formed 0.7% of male workers and 0.9% of female workers (Table 2.9). The percentage of migrants in the workforce was highest for 25-34 year olds, and lowest for 16-24 year olds and 60-64 year olds. The share of workers born in the rest of the world was now highest for those aged 25-34. The number of workers born in the EU was too small for percentages to be reported.

b) Industry

Table 2.10 presents change in the percentage of workers born in the UK and each region of the world between 1994 and 2004 by industry. For men, migrant workers were most common in hotels & catering, education and the rest of manufacturing in 1994. For females, the percentage of migrant workers was highest in engineering, agriculture, education and health & social work.

By 2004, the percentage of foreign-born workers had increased for both men and women in most industries. For men, the largest shares of employment were in health & social work, hotels & catering and food, drink & tobacco. Their share of employment increased fastest in health & social work and food, drink & tobacco, but fell in hotels & catering. For women, the percentage of foreign-born workers was highest in food, drink & tobacco, engineering and health & social work. The increase in the percentage foreign-born was greatest in food, drink & tobacco.

In 1994, only 0.8% of males and 1% of females in work had been born in other EU15 countries, and nearly all non-UK born workers had origins outside Europe, for whom the rest of manufacturing was the most important source of employment (Table 2.11). By 2004, still only 0.7% of males, and 0.9% of females in work had been born in other countries of EU15 (Table 2.12). When employment is broken down by industry, the numbers are again all to report for Europe, but men born in the rest of the world worked in health & social work, transport & telecommunications, rest of manufacturing and distribution. Health & social work was the largest source of employment for women born in the rest of the world in 2004.

c) Occupation

In 2004, the percentage of workers born outside the UK was highest for professional occupations, elementary occupations and process, plant & machinery operatives (Table 2.13). The percentages born in the rest of the world were highest for professional occupations, followed by process, plant & machinery operatives and elementary occupations.

d) Ethnic group

In 2004, only 2.1% of white workers had been born outside the UK, and 1.1% had been born in the rest of the world (Table 2.14). Nearly all Black-African, and 76.5% of workers from 'Other' ethnic groups had been born outside the UK. However, 70.3% of Black-Caribbean, 45% of Indian and 43.6% of Pakistani workers were UK-born.

Table 2.7: Change in Percentage of Workers, Non-UK Born, 1994-2004, by Age Group

	Workers 1994				Workers 2004			
	Males (000s)	Percent Non-UK born	Females (000s)	Percent Non-UK born	Males (000s)	Percent Non-UK born	Females (000s)	Percent Non-UK born
16-24	160	2.4	153	2.6	177	4.1	159	2.8
25-34	303	3.4	254	3.0	253	8.4	226	6.3
35-44	269	6.1	234	3.7	332	4.9	291	4.5
45-59	329	2.4	279	2.4	386	5.2	339	2.6
60-64	48	1.4	26	4.6	60	4.9	36	5.3
Total	1,109	3.5	946	3.0	1,208	5.6	1,051	4.1

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.8: Percentage of Migrants in the Employed Workforce by Age Group, 1994

Age group	Males in work (000s)	Country of birth				Females in work (000s)	Country of birth			
		UK	Other EU 15	Accession 10	Rest of world		UK	Other EU 15	Accession 10	Rest of world
16-24	160	97.6	-	-	-	153	97.4	-	-	-
25-34	303	96.6	-	-	2.1	254	97.0	-	-	-
35-44	269	93.9	-	-	4.7	234	96.3	-	-	2.6
45-59	329	97.6	-	-	-	279	97.6	-	-	-
60-64	48	98.6	-	-	-	26	95.4	-	-	-
Total	1,109	96.5	0.8	-	2.5	946	97.0	1.0	-	1.9

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.9: Percentage of Migrants in the Employed Workforce by Age Group, 2004

Age group	Males in work (000s)	Country of birth				Females in work (000s)	Country of birth			
		UK	Other EU 15	Accession 10	Rest of world		UK	Other EU 15	Accession 10	Rest of world
16-24	177	95.9	-	-	-	159	97.2	-	-	-
25-34	253	91.6	-	-	7.6	226	93.7	-	-	4.8
35-44	332	95.1	-	-	3.9	291	95.5	-	-	3.6
45-59	386	94.8	-	-	4.4	339	97.4	-	-	1.9
60-64	60	95.1	-	-	-	36	94.7	-	-	-
Total	1,208	94.4	0.7	-	4.7	1,051	95.9	0.9	-	3.0

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.10: Change in Percentage of Workers, Non-UK Born, 1994-2004, by Industry

	Workers 1994				Workers 2004			
	Males (000s)	Percent Non-UK born	Females (000s)	Percent Non-UK born	Males (000s)	Percent Non-UK born	Females (000s)	Percent Non-UK born
Agriculture etc	25	0.9	8	5.6	22	3.9	5	-
Mining & quarrying	12	1.9	0	-	4	-	0	-
Food, drink & tobacco	35	4.7	24	1.7	35	10.9	22	9.9
Engineering	65	1.0	20	5.8	51	6.8	10	7.4
Rest of manufacturing	227	4.8	83	3.8	198	4.8	50	3.3
Electricity, gas & water	13	4.2	3	-	11	3.5	4	-
Construction	139	1.6	14	0.0	173	2.4	22	1.2
Distribution	171	3.1	182	2.1	174	5.3	186	3.4
Hotels and catering	34	14.2	68	1.7	40	12.5	64	4.1
Transport & telecommunications	91	4.5	26	0.8	126	6.1	36	5.2
Banking & insurance	29	1.7	42	1.6	35	4.1	50	3.6
Other business services	83	0.8	73	3.2	117	5.9	88	3.0
Public admin and defence	62	3.1	55	1.2	73	3.6	69	4.8
Education	52	5.0	109	5.5	63	3.4	162	2.6
Health and social work	42	4.4	184	3.8	57	14.5	227	5.9
Miscellaneous services	45	4.8	66	2.4	46	5.9	71	2.6
Total	1,126	3.6	957	3.0	1,225	5.6	1,065	4.1

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.11: Percentage of Migrants in the Employed Workforce by Industry, 1994

	Males in work (000s)	Country of birth				Females in work (000s)	Country of birth			
		UK	Other EU 15	Accession 10	Rest of world		UK	Other EU 15	Accession 10	Rest of world
Agriculture etc	25	99.1	-			8	94.4	-		-
Mining & quarrying	12	98.1	-			0	-			
Food, drink & tobacco	35	95.3	-	-	-	24	98.3	-		-
Engineering	65	99.0				20	94.2	-		-
Rest of manufacturing	227	95.2	-	-	3.9	83	96.2	-	-	-
Electricity, gas & water	13	95.8	-			3	-			
Construction	139	98.4	-			14	100.0			
Distribution	171	96.9	-			182	97.9	-	-	-
Hotels and catering	34	85.8	-	-	-	68	98.3	-	-	-
Transport & telecommunications	91	95.5	-	-	-	26	99.2			-
Banking & insurance	29	98.3	-			42	98.4	-		-
Other business services	83	99.2				73	96.8	-		-
Public admin and defence	62	96.9	-	-	-	55	98.8	-		-
Education	52	95.0		-	-	109	94.5	-	-	-
Health and social work	42	95.6	-			184	96.2	-	-	-
Miscellaneous services	45	95.2	-			66	97.6	-		-
Total	1,126	96.4	0.8	-	2.6	957	97.0	1.0	-	1.9

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.12: Percentage of Migrants in the Employed Workforce by Industry, 2004

	Males in work (000s)	Country of birth				Females in work (000s)	Country of birth			
		UK	Other EU 15	Accession 10	Rest of world		UK	Other EU 15	Accession 10	Rest of world
Agriculture etc	22	96.1		-	-	5	-			
Mining & quarrying	4	-				0				
Food, drink & tobacco	35	89.1		-	-	22	90.1	-	-	-
Engineering	51	93.2	-		-	10	92.6	-		-
Rest of manufacturing	198	95.2	-	-	4.4	50	96.7	-		-
Electricity, gas & water	11	96.5			-	4	-	-		
Construction	173	97.6	-		-	22	98.8			-
Distribution	174	94.7	-	-	3.7	186	96.6	-	-	-
Hotels and catering	40	87.5		-	-	64	95.9	-	-	-
Transport & telecommunications	126	93.9	-	-	5.2	36	94.8	-		-
Banking & insurance	35	95.9	-		-	50	96.4	-		-
Other business services	117	94.1	-		-	88	97.0	-		-
Public admin and defence	73	96.4	-		-	69	95.2	-	-	-
Education	63	96.6	-		-	162	97.4	-	-	-
Health and social work	57	85.5	-		14.0	227	94.1	-	-	4.8
Miscellaneous services	46	94.1	-		-	71	97.4	-		-
Total	1,225	94.4	0.7	-	4.6	1,065	95.9	0.9	-	2.9

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.13: Percentage of Migrants by Occupation, 2004

	All in work (000s)	Born in UK	Born in EU 15	Born in Accession 10	Born in rest of world
Managers and Senior Officials	308	96.5	-	-	2.3
Professional occupations	256	92.2	-	-	6.8
Associate Professional and Technical	294	94.2	-	-	4.8
Administrative and Secretarial	261	97.0	-	-	2.2
Skilled Trades Occupations	279	97.2	-	-	2.2
Personal Service Occupations	176	95.9	-	-	3.5
Sales and Customer Service Occupations	197	96.1	-	-	2.3
Machine and Transport Operatives	211	93.8	-	-	5.1
Elementary Occupations	307	93.5	1.1	-	5.0
All occupations	2,291	95.1	0.8	0.2	3.8

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

Table 2.14: Percentage of Migrants by Ethnic Group, 2004

	All in work (000s)	Born in UK	Born in EU 15	Born in Accession 10	Born in rest of world
White	2,173	97.9	0.8	0.2	1.1
Mixed	13	82.5	-	-	-
Indian	26	45.0	-	-	55.0
Pakistani	39	43.6	-	-	54.5
Bangladeshi	3	-	-	-	-
Other Asian	2	-	-	-	-
Black-Caribbean	11	70.3	-	-	29.7
Black-African	9	-	-	-	96.9
Black-Other	1	-	-	-	-
Chinese	2	-	-	-	-
Other	12	-	-	-	76.5
All Ethnic groups	2,291	95.1	0.8	0.2	3.8

Source: IER estimates based on the LFS.

Note: Following ONS guidelines, percentages based on numbers below 6,000 individuals have been suppressed and replaced by the symbol “-”.

2.4 Key Structural Features of the Labour Market

This section presents some more general information on labour market trends and prospects, across **all** ethnic groups. This is based on data from *Working Futures* and is consistent with the material presented above. It is intended to provide a context for the developments in employment patterns by ethnic group, etc, discussed above.

Figures 2.4 and 2.5 provide a brief summary of the key features of general employment patterns in the geographical area concerned, focussing upon patterns and projected future changes by:

- gender & status;
- sector; and
- occupation.

Figure 2.4 presents an overview of the current position. Figure 2.5 shows the projected position in 2014, based on *Working Futures*.

The first panel of each figure shows the size of the population in the region, the population aged 16+ and the labour force. Further details of demographic and labour force trends by age and gender are provided in Section 2.5. This first panel also shows the two main measures of employment used in this study. Total workplace employment is a measure of the number of jobs in the region. The second measure is the number of employed residents (heads). The former is the main measure of employment used in *Working Futures*. The second measure is more directly comparable with the labour supply indicators such as population and the labour force which also focus on 'heads' and are residence based. Finally the first panel shows two measures of unemployment. The first is the claimant count. The second is the more comprehensive ILO measure which covers all those actively searching for work. Further details of the various definitions used are given in Box 2.1.

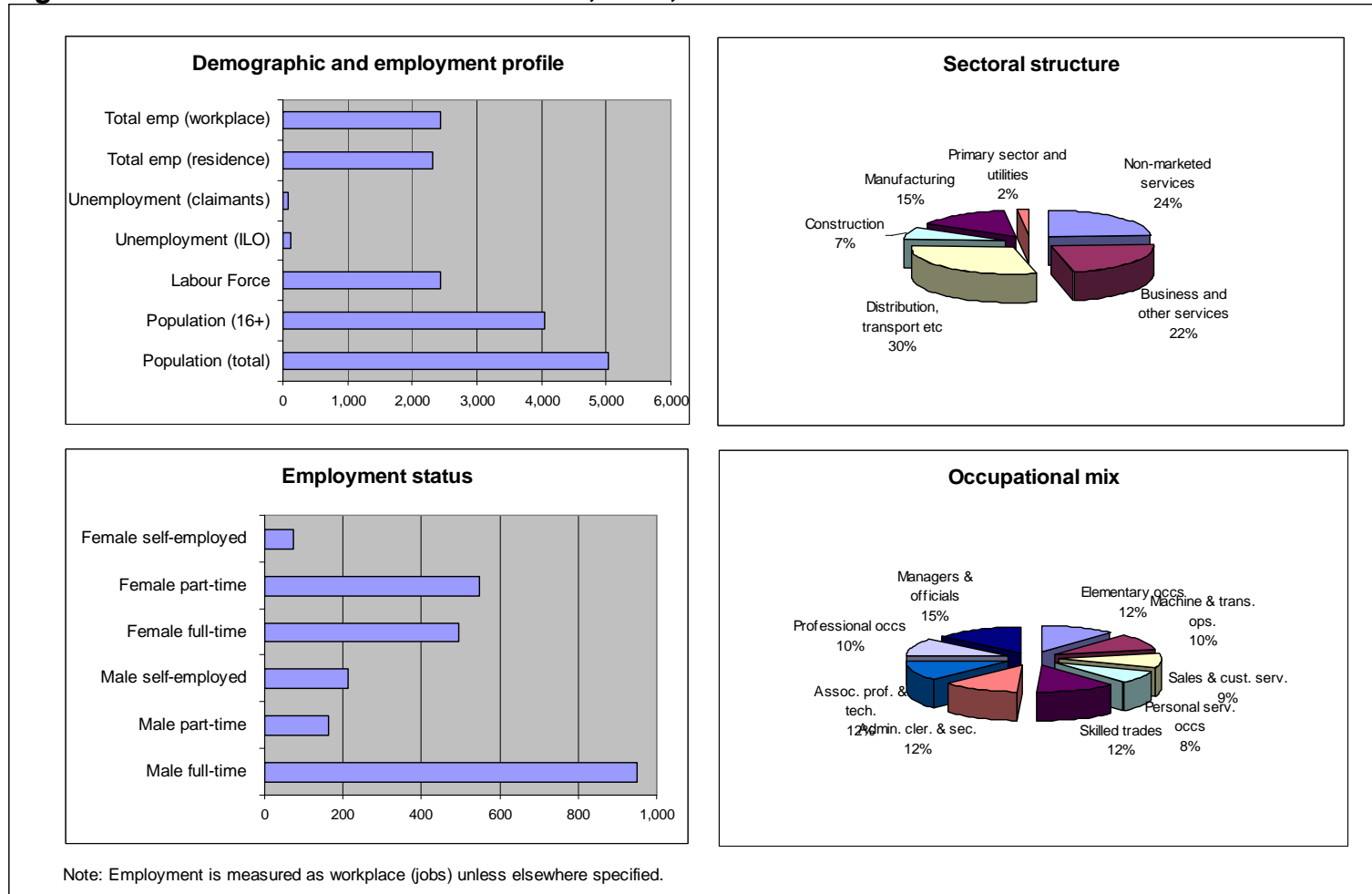
Figures 2.6 and 2.7 show how these patterns of change vary. Figure 2.6 illustrates the absolute changes. Figure 2.7 presents percentage increases, including the corresponding rate of change in Great Britain as a whole, so that the region's experience can be compared to the general position.

The three other panels of Figures 2.6 and 2.7 illustrate the structure of employment by:

- sector;
- employment status and gender; and by
- occupation.

A more detailed discussion of general prospects for the region can be found in the *Working Futures* spatial report (Green *et al.* 2005).

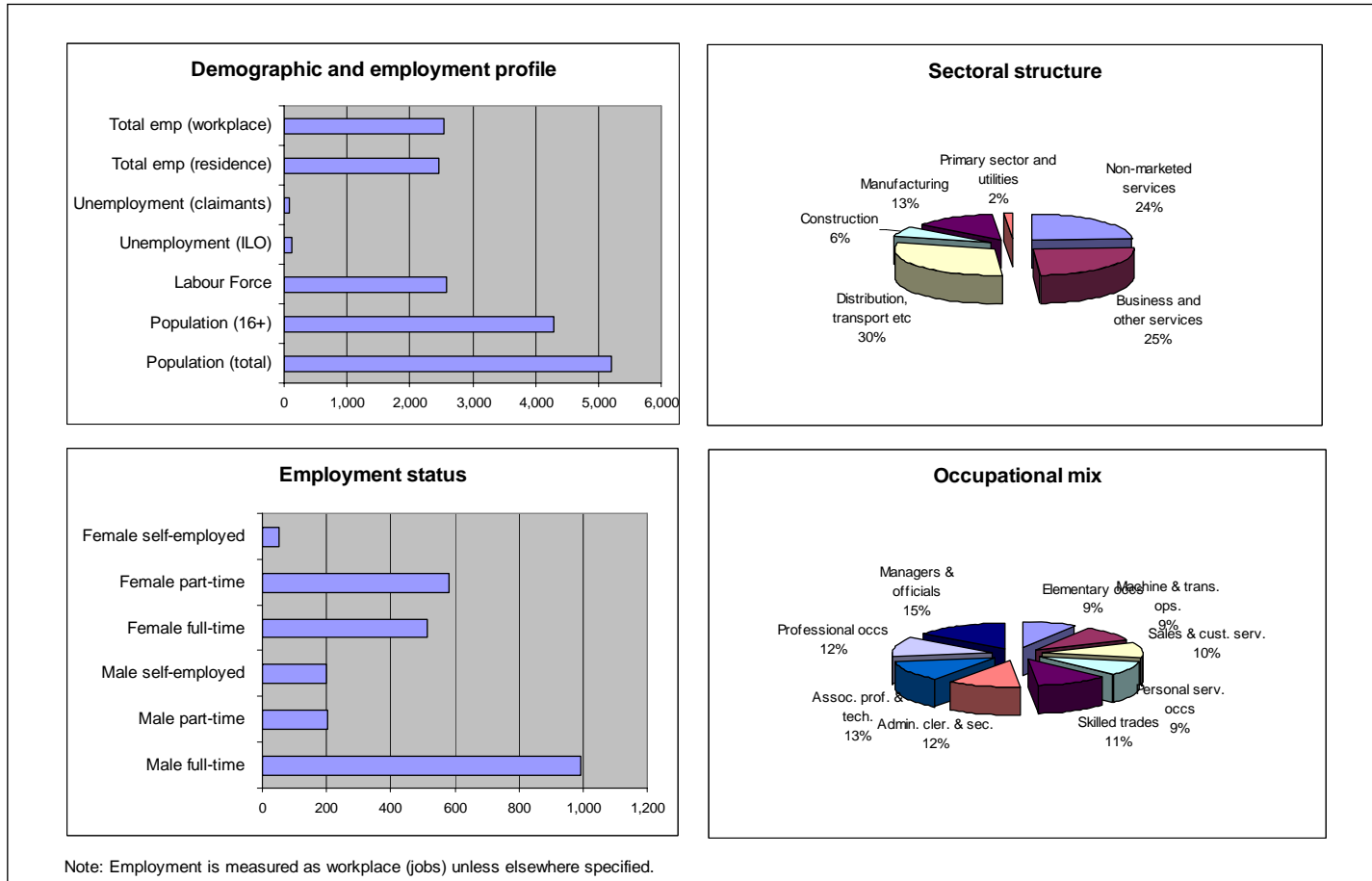
Figure 2.4: General Labour Market Profile, 2004, Yorkshire and the Humber



Source: IER estimates based on *Working Futures 2004-2014*.

Notes: Employment estimates are workplace (jobs) unless elsewhere specified.

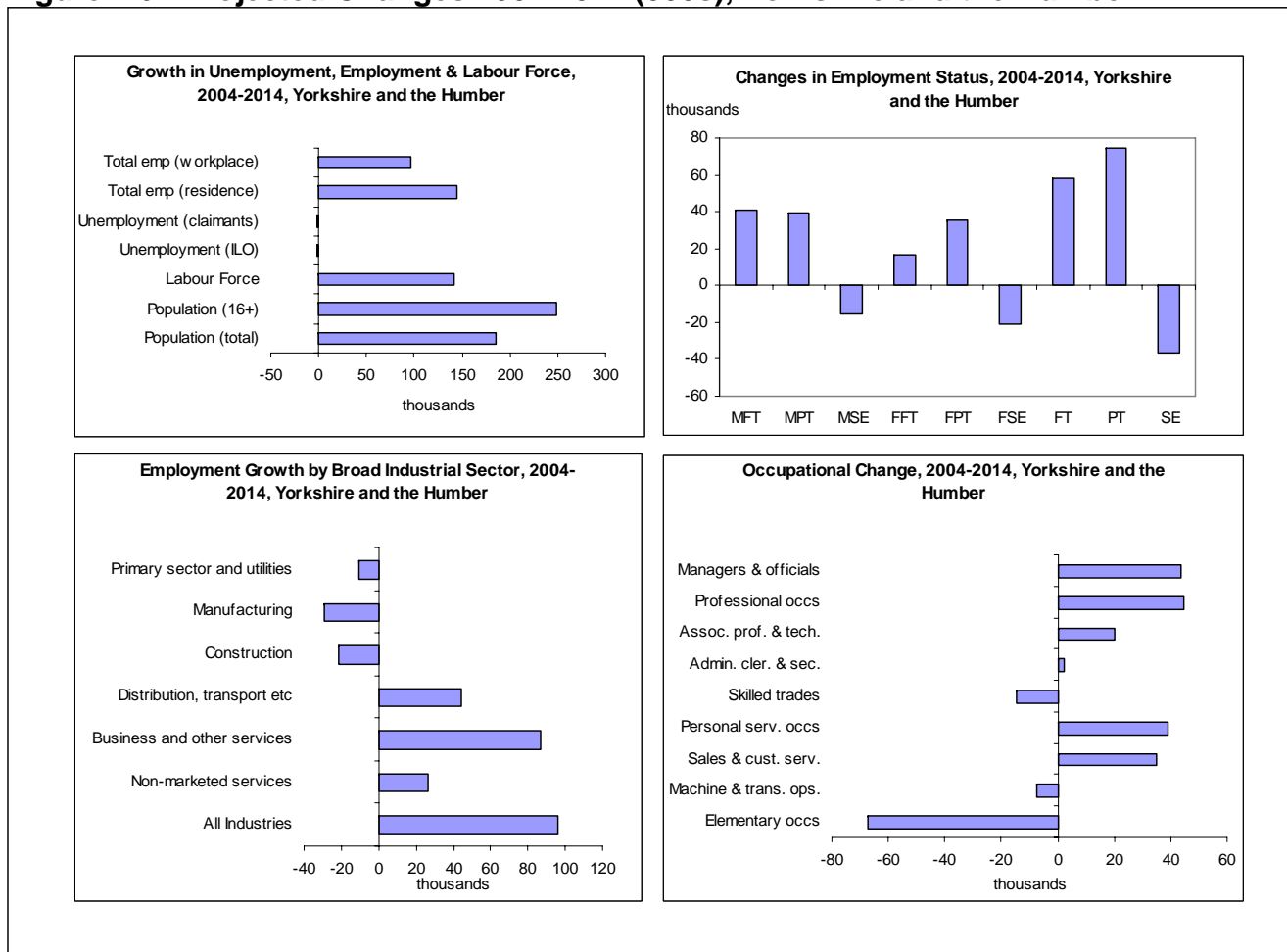
Figure 2.5: General Labour Market Profile, 2014, Yorkshire and the Humber



Source: IER estimates based on *Working Futures 2004-2014*.

Notes: Employment estimates are workplace (jobs) unless elsewhere specified.

Figure 2.6: Projected Changes 2004-2014 (000s), Yorkshire and the Humber

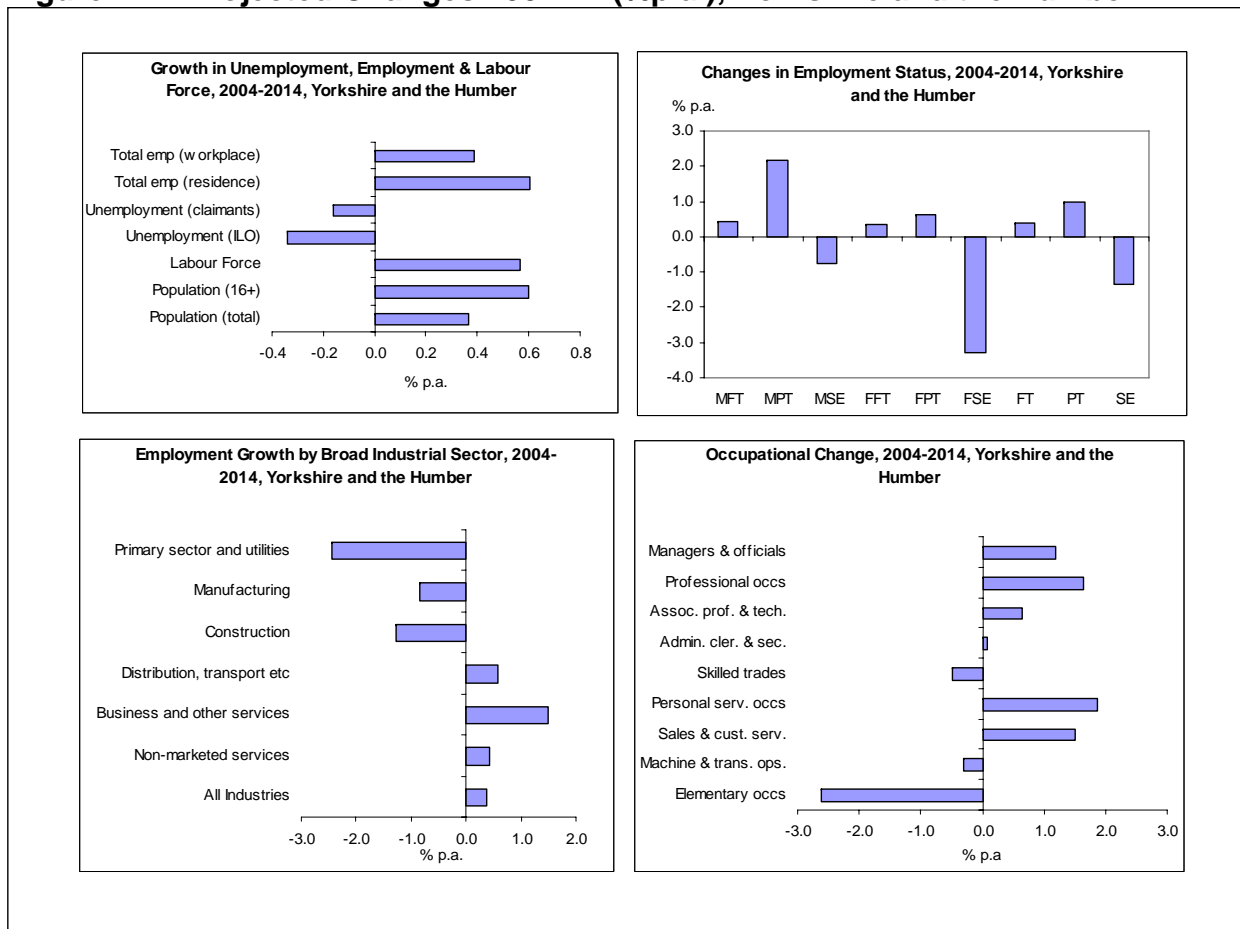


Key: MFT: males full-time employees; MPT: male part-time employees; MSE: males self-employed; FFT: female full-time employees; FPT: female part-time employees; FSE: females self-employed; FT: full-time employees; PT: part-time employees; SE: self-employed

Source: IER estimates based on *Working Futures 2004-2014*.

Notes: Employment estimates are workplace (jobs) unless elsewhere specified.

Figure 2.7: Projected Changes 2004-14 (%p.a.), Yorkshire and the Humber



Key: MFT: male full-time employees; MPT: male part-time employees; MSE: males self-employed; FFT: female full-time employees; FPT: female part-time employees; FSE: females self-employed; FT: full-time employees; PT: part-time employees; SE: self-employed

Source: IER estimates based on *Working Futures 2004-2014*.

Notes: Employment estimates are workplace (jobs) unless elsewhere specified.

2.5 Demographic structure

Profiles of population and the Labour Force by age and gender

Table 2.15 presents estimates and projections of population by gender and broad age group for the region. These are based on official ONS/GAD estimates although the projections have been modified to reflect migration patterns between regions as developed in the CE multisectoral regional model (MRM). They do not include a breakdown by ethnic group. At present there are no official projections of labour supply by ethnic group. ONS plan to produce such projections in the near future. Once available this will enable projections of labour supply by ethnic group to be produced.

The results suggest that patterns of change for the region are generally similar to those for England as a whole. Declines are projected in the younger age categories and for prime age workers (aged 35-44). The fastest increases are for those aged 45 or more.

The Labour Force

The projections of the labour force are based on estimates developed by Cambridge Econometrics which extend those developed for *Working Futures* by adding an age dimension. They are based upon a disaggregated model which relates the proportion of the population that is economically active to the unemployment rate. Details of the various indicators used are given in Box 2.1. The results in Table 2.16 presents historical estimates and projections of the total numbers economically active (the labour force).

The labour force as a whole is projected to grow by just under 6% by 2014. This reflects the demographic changes already discussed. The fastest increases are expected for older workers (45+).

Activity Rates

Table 2.17 illustrates patterns of economic activity rates (labour force as a percentage of the population). Activity rates are generally expected to rise for most gender/age categories. Especially large increases are projected for females aged 25-34 (just under 7 percentage points). This reflects growing concerns about the pension crisis and the need for people to work longer.

Box 2.1: Definitions of Employment and Related Labour Market Indicators**Alternative Definitions**

There are various ways of looking at employment. For example, a distinction can be made between the number of people in employment (head count) and the number of jobs. These two concepts represent different things, as one person may hold more than one job. In addition, a further distinction can be made between area of residence and area of workplace. Similarly there are various different definitions of unemployment, the labour force, workforce and population. In *Working Futures 2004-2014* the following definitions are used:

Residence basis: measured at place of residence (as in the Labour Force Survey (LFS)).

Workplace basis: measured at place of work (as in the Annual Business Inquiry (ABI)).

Workplace employment (number of jobs): these are typically estimated using surveys of employers, such as the ABI, focussing upon the numbers of jobs in their establishments. In this report references to employment relate to the number of jobs unless otherwise stated.

Employed residents (head count): the number of people in employment. These estimates are based primarily on data collected in household surveys, e.g. the LFS. People are classified according to their main job. Some have more than one job.

ILO unemployment: covers people who are out of work, want a job, have actively sought work in the previous four weeks and are available to start work within the next fortnight (or out of work and have accepted a job that they are waiting to start in the next fortnight).

Claimant Unemployed: measures people claiming Job Seeker's Allowance benefits.

Workforce: the total number of workforce jobs, and is obtained by summing workplace employment (employee jobs and self-employment jobs), HM Forces, government-supported trainees and claimant unemployment.

Labour Force: employed residents plus ILO unemployment.

Labour market participation or **Economic activity rate:** the number of people who are in employment or (ILO) unemployed as a percentage of the total population aged 16 and over.

Labour Market Accounts Residual: workplace employment minus residence employment. The main cause of the residual at national level is "double jobbing". At a more disaggregated spatial level, net commuting across geographical boundaries is also very significant. The difference will also reflect data errors and other minor differences in data collection methods in the various sources.

Total Population: the total number of people resident in an area (residence basis).

Population 16+: the total number of people aged 16 and above (residence basis).

Working-age population: the total number of people aged, (residence basis).

Table 2.15: Population, Yorkshire and the Humber

Total		(000s)			
		2004	2014	2004-2014	% increase
1	0-15	990	927	-63	-6.4
2	16-24	612	636	24	3.9
3	25-34	621	670	49	7.9
4	35-44	755	644	-111	-14.7
5	45-59	977	1,077	100	10.2
6	60-64	254	296	42	16.5
7	65+	818	965	147	18.0
All ages		5,027	5,215	188	3.7

Males		(000s)			
		2004	2014	2004-2014	% increase
1	0-15	505	470	-35	-6.9
2	16-24	312	323	11	3.5
3	25-34	305	337	32	10.5
4	35-44	373	313	-60	-16.1
5	45-59	486	534	48	9.9
6	60-64	125	145	20	16.0
7	65+	347	430	83	23.9
All ages		2,453	2,552	99	4.0

Females		(000s)			
		2004	2014	2004-2014	% increase
1	0-15	485	457	-28	-5.8
2	16-24	300	313	13	4.3
3	25-34	316	333	17	5.4
4	35-44	382	331	-51	-13.4
5	45-59	491	543	52	10.6
6	60-64	129	151	22	17.1
7	65+	471	535	64	13.6
All ages		2,574	2,663	89	3.5

Source: *Working Futures 2004-2014*, extended (CE MRM).

Table 2.16: Labour Force, Yorkshire and the Humber

Total		(000s)			
		2004	2014	2004-2014	% increase
1	0-15	0	0	0	0.0
2	16-24	403	426	23	5.7
3	25-34	501	580	79	15.8
4	35-44	644	560	-84	-13.0
5	45-59	755	848	93	12.3
6	60-64	99	120	21	21.2
7	65+	39	50	11	28.2
All ages		2,441	2,584	143	5.9

Males		(000s)			
		2004	2014	2004-2014	% increase
1	0-15	0	0	0	0.0
2	16-24	218	227	9	4.1
3	25-34	276	320	44	15.9
4	35-44	343	291	-52	-15.2
5	45-59	403	446	43	10.7
6	60-64	61	73	12	19.7
7	65+	25	33	8	32.0
All ages		1,326	1,390	64	4.8

Females		(000s)			
		2004	2014	2004-2014	% increase
1	0-15	0	0	0	0.0
2	16-24	185	199	14	7.6
3	25-34	225	260	35	15.6
4	35-44	301	269	-32	-10.6
5	45-59	352	402	50	14.2
6	60-64	38	47	9	23.7
7	65+	14	17	3	21.4
All ages		1,115	1,194	79	7.1

Source: *Working Futures 2004-2014*, extended (CE MRM).

Note: Numbers of people (residents/heads).

Table 2.17: Activity rates, Yorkshire and the Humber

Total		%		
		2004	2014	2004-2014
1	0-15	0.0	0.0	0.0
2	16-24	65.8	67.0	1.1
3	25-34	80.7	86.6	5.9
4	35-44	85.3	87.0	1.7
5	45-59	77.3	78.7	1.5
6	60-64	39.0	40.5	1.6
7	65+	4.8	5.2	0.4
All ages		48.6	49.5	1.0

Males		%		
		2004	2014	2004-2014
1	0-15	0.0	0.0	0.0
2	16-24	69.9	70.3	0.4
3	25-34	90.5	95.0	4.5
4	35-44	92.0	93.0	1.0
5	45-59	82.9	83.5	0.6
6	60-64	48.8	50.3	1.5
7	65+	7.2	7.7	0.5
All ages		54.1	54.5	0.4

Females		%		
		2004	2014	2004-2014
1	0-15	0.0	0.0	0.0
2	16-24	61.7	63.6	1.9
3	25-34	71.2	78.1	6.9
4	35-44	78.8	81.3	2.5
5	45-59	71.7	74.0	2.3
6	60-64	29.5	31.1	1.7
7	65+	3.0	3.2	0.2
All ages		43.3	44.8	1.5

Source: *Working Futures 2004-2014*, extended (CE MRM).

Annex A

Background, Aims and Objectives

The present analysis builds upon *Working Futures 2004-2014*. *Working Futures* presents the most detailed and comprehensive set of employment and labour market projections ever produced for the UK.^{2,3} *Working Futures* already provides a comprehensive analysis of changing patterns of employment by gender, status, sector and occupation for all the countries of the UK and the English regions. The present report adds value to this by extending the analysis in a number of important respects.

First, a detailed analysis of historical patterns of employment, distinguishing ethnicity and migrant workers is conducted across the 9 regions of England and at national (England, and in some cases at a GB) level. This is based on an interrogation of data from the Labour Force Survey (LFS) and the Census of Population (CoP). Where possible, the historical profiles of change by ethnic group have been explored in detail (as far as the available data permit), including analyses by industry and by occupation. The available historical information on migrant workers is also highlighted, including some of the issues surrounding factors influencing migration flows, relevant policies and measurement issues. This information is more limited than that available on ethnicity generally.

Second, the *Working Futures* analysis of labour supply is extended to cover age as well as gender. Again this covers both historical patterns and expected future trends for each of the English regions. Detailed profiles of the changing age structure of the population and workforce are presented. It is important to note that at present no projections of labour supply by ethnic group have been produced as part of this project. At present ONS do not produce projections of population by ethnic group although such analysis is planned. Once available this will enable projections of labour supply by ethnic group to be produced.

Third, material taken from *Working Futures* is repackaged in a novel fashion to focus attention on the different patterns of employment, both historical and projected, in the 9 regions of England. This analysis focuses upon gender, status, sector and occupation. This section focuses on providing a brief graphical and tabular summary of the main characteristics of the national and regional economies in terms of current employment patterns and expected future change (2004-14), with particular emphasis on expected structural change by sector and occupation.

The main *Working Futures* database relates to workplace employment (jobs). Employment matrices are developed using LFS data (residence/heads), showing how patterns of employment by ethnic group and migrant workers vary across both sector and occupation. These matrices are then applied to the estimated levels of workplace employment (jobs) by sector and occupation taken from *Working Futures* to give estimates of jobs by ethnic group. Because of data limitations (and also the difficulty of taking into account underlying demographic changes), the exploration of

² The results of *Working Futures 2004-2014* are available in 5 separate volumes.

³ *Working Futures 2004-2014* was commissioned by the SSDA and funded by the SSDA and its partners (including the LSC).

trends in the numbers of migrant workers is much less comprehensive than that for ethnicity and the analysis for neither group includes projections.⁴

Where possible (given data limitations) an analysis of patterns by age and ethnicity is also undertaken. However, the data available are very limited and this is not comprehensive.

A standard set of “profiles” is developed for each region and the whole of the East of England. These present information in a consistent and comparable format, enabling direct comparisons to be made. These profiles are primarily in the form of a standard set of tables and charts, with only limited text. The latter is confined to a few bullet points highlighting key features.

This quantitative analysis is complemented in the *National Report* by 2 small scale case studies intended to illustrate some of the key issues facing local LSCs and others in dealing with issues relating to ethnicity and migration. These case studies examine, briefly, the potential impact of a large scale development (the Thames Gateway) and explore, briefly, the position of an exemplar rural area reliant on migrant workers in some sectors/occupations (Norfolk). The selection of the case studies was made by the researchers, in conjunction with the project Steering Group.

The main period for analysis is 1994 - 2004, reflecting the historical period covered by the data from *Working Futures* with some projections of the labour force (not distinguishing ethnicity) for 2004-2014. Historical data are also exploited from a variety of other sources in addition to the LFS and the CoP in order to add insights into changing patterns by ethnicity, age and migrant workers which are not covered in the main *Working Futures* database.

The *National Report* and *Regional Profiles* are complemented by a *Technical Report*. This explains the data sources used, outlines definitional issues and problems and describes the general methodological approach employed.

It should be recognised that data limitations preclude producing comprehensive analyses of ethnicity and age across all the dimensions currently covered in *Working Futures*. Rather, the aim is to provide a summary of national and regional ethnic profiles, exploiting the data as far as possible to provide detail across all the selected dimensions.

In combination, this set of reports provides new information on a consistent and comparable basis across regions which highlight some of the key features of the industrial, occupational and geographical profiles for ethnic groups and migrant workers.

⁴ ONS are currently developing benchmark demographic projections by ethnic group which will enable such an extension in future.

Glossary

A8	Accession 8 countries: 8 of the 10 countries entering the EU in 2004 – the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia; (Malta and Cyprus were the other 2 new entrants to the EU)
BME	Black and Minority Ethnic
EEA	European Economic Area
EEDA	East of England Development Agency
ESF	European Social Fund
ESOL	English for Speakers of Other Languages
FE	Further Education
GLLaB	Greenwich Local Labour and Business
IAG	Information Advice and Guidance
LORECA	London Refugee Economic Action
NARIC	National Academic Recognition Information Centre
NASS	National Asylum Support Services
NGO	Non-Governmental Organisations
NINo	National Insurance Number
PCT	Primary Care Trust
PSA	Public Service Agreement
RCO	Refugee and Community Organisations
RDA	Regional Development Agency
SAWS	Seasonal Agricultural Workers Scheme

References

Green A., K. Homenidou, R. White and R. Wilson (2005) *Working Futures 2004-2014: Spatial Report*. SSDA: Wath on Dearne.

Green A., D. Owen and R. Wilson (2005) *Regional Profiles of the Workforce by Ethnicity and Migrant Workers: National Report*. LSC: Coventry.